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| EXAMINER |
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NAHAR, QAMRUN

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| ART UNIT | PAPER NUMBER |
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2191

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06/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/589,200 | <b>Applicant(s)</b><br>THOMPSON ET AL. |  |
|                              | <b>Examiner</b><br>Qamrun Nahar      | <b>Art Unit</b><br>2191                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/28/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

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### DETAILED ACTION

1. This action is in response to the amendment filed on 03/28/2007.
2. The rejection under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter to claims 10-20, 23 and 27-29 is withdrawn in view of applicant's remarks/arguments.
3. Claims 1-29 are pending.

### *Double Patenting*

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No.

09/739,317 in view of Ernst (U.S. 5,890,133). The following example is given:

As per claim 1 of the instant application, copending Application No. 09/739,317 discloses (in claim 1):

A method of generating a process plan comprising: i) storing at least one generic process plan, ii) storing at least one non-generic process element containing a predetermined pattern, iii) searching said at least one generic process plan for the predetermined pattern contained by at least one non-generic process element, iv) on detection of the predetermined pattern, inserting content from said at least one non-generic process element into the generic process plan to generate a process plan, and v) outputting the generated process plan, wherein instructions for the insertion of said content in said step of inserting content are coded into said at least one non-generic process element.

Copending Application No. 09/739,317 does not explicitly disclose that the insertion of said content is at runtime. Ernst teaches to generate a process plan at runtime (column 7, lines 9-23).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by the copending Application No. 09/739,317 to generate a process plan at runtime using the teaching of Ernst. The modification would be obvious because one of ordinary skill in the art would be motivated to take into consideration the dynamic behavior of the flow of business process.

This is a provisional obviousness-type double patenting rejection.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over S. Jablonski, "On the Complementarity of Workflow Management and Business Process Modeling", 1995 (hereinafter "Jablonski") in view of Schmidt, et al. "Extending Aspect-Oriented Programming in order to Flexibly Support Workflows", 1998 (Art of Record submitted in the concurrently filed IDS, hereinafter "Schmidt").

**Per Claim 1:**

Jablonski teaches storing at least one generic process plan ("The first step is mandatory ... obtain a valid *workflow specification*." on pg. 36, 2<sup>nd</sup> column, par. 6 to pg. 37, 1<sup>st</sup> column, par. 1); storing at least one non-generic process element containing a predetermined pattern ("Functional Perspective ... *activities*" on pg. 37, 1<sup>st</sup> column, par. 4). Jablonski does not explicitly teach searching said at least one generic process plan for the predetermined pattern contained by at least one non-generic process element, on detection of the predetermined pattern, inserting content from said at least one non-generic process element into the generic process plan to generate a process plan, and outputting the generated process plan, wherein an instruction coded into each of the at least one non-generic process element determines how content is

merged from the non-generic process element into the generic process plan at runtime of the generic process plan.

Schmidt teaches searching said at least one generic process plan for the predetermined pattern contained by at least one non-generic process element, on detection of the predetermined pattern, inserting content from said at least one non-generic process element into the generic process plan to generate a process plan, and outputting the generated process plan; wherein an instruction coded into each of the at least one non-generic process element determines how content is merged from the non-generic process element into the generic process plan at runtime of the generic process plan (“... The different workflow-aspects from the workflow model are implemented as components which contain introspection and specialization mechanisms, allowing them to be used with a component weaver. Not all aspects have to be implemented from scratch, because generic workflow functionality may also be introduced by adding pre-fabricated components. They may be selected from a component repository or even a component market, using the specification of the workflow model. The aspect-specific components are put into the component-weaver, which combines them into a component-based workflow application. ...” in pg. 5, par. 1, lines 1-11; and see Figure 3).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Jablonski to searching said at least one generic process plan for the predetermined pattern contained by at least one non-generic process element, on detection of the predetermined pattern, inserting content from said at least one non-generic process element into the generic process plan to generate a process plan, and outputting the generated process plan, wherein an instruction coded into each of the at least one

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non-generic process element determines how content is merged from the non-generic process element into the generic process plan at runtime of the generic process plan using the teaching of Schmidt. The modification would be obvious because one of ordinary skill in the art would be motivated to replace components in the implementation without running through the whole edit-compile cycle (Schmidt, on pg. 5, par. 1, lines 8-10).

**Per Claim 2:**

The rejection of claim 1 is incorporated, and Jablonski further teaches the steps of receiving for storage at least one generic process plan and receiving for storage at least one non-generic process element (on pg. 36, 2<sup>nd</sup> column, par. 6 to pg. 37, 1<sup>st</sup> column, par. 1; and on pg. 37, 1<sup>st</sup> column, par. 4).

**Per Claim 3:**

The rejection of claim 1 is incorporated, and Jablonski further teaches each stored generic process plan is indexed in accordance with a goal to be achieved by the plan, receiving a goal input, and selecting a generic process plan for searching, said selection being in accordance with the received goal input (on pg. 34, 2<sup>nd</sup> column, par. 1, lines 13-18).

**Per Claim 4:**

The rejection of claim 1 is incorporated, and Jablonski further teaches at least one non-generic process element comprises resource information, identifying one or more resources to support a process step in a generated process plan (on pg. 37, 1<sup>st</sup> column, par. 6, lines 1-13).

**Per Claim 5:**

The rejection of claim 4 is incorporated, and Jablonski further teaches each stored non-generic process element comprising resource information is indexed in accordance with one or more relevant resources (on pg. 37, 1<sup>st</sup> column, par. 6, lines 1-13).

**Per Claim 6:**

The rejection of claim 1 is incorporated, and Schmidt further teaches wherein content inserted from the at least one non-generic process element comprises data (“... Pre-fabricated Components” on pg. 5, par. 1, lines 1-11).

**Per Claim 7:**

The rejection of claim 1 is incorporated, and Jablonski further teaches at least one non-generic process element comprises context specific method steps or data and is indexed for storage according to the relevant context (“Functional Perspective ... *activities*” on pg. 37, 1<sup>st</sup> column, par. 4).

**Per Claim 8:**

The rejection of claim 7 is incorporated, and Jablonski further teaches the context for at least one non-generic process element is service type (“Functional Perspective ... *activities*” on pg. 37, 1<sup>st</sup> column, par. 4).



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**Per Claim 9:**

The rejection of claim 7 is incorporated, and Jablonski further teaches the context for at least one non-generic process element is customer type (on pg. 37, 1<sup>st</sup> column, par. 6, lines 1-13).

**Per Claim 21:**

The rejection of claim 1 is incorporated, and Schmidt further teaches wherein the content introduces new process steps with respect to the generic process plan (pg. 5, par. 1, lines 8-11).

**Per Claim 22:**

The rejection of claim 1 is incorporated, and Schmidt further teaches wherein the content advises existing process steps of the generic process plan (pg. 5, par. 1, lines 8-11).

**Per Claims 10 & 11-14, 15, 16-20:**

These are apparatus versions of the claimed method discussed above (claims 1-9 and 21-22, respectively), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also obvious.

**Per Claim 23:**

This is a method version of the claimed apparatus discussed above, claim 18, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this claim is also obvious.

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**Per Claim 24:**

The rejection of claim 1 is incorporated, and Schmidt further teaches wherein instructions respectively coded into non-generic process elements determine a sequence in which said non-generic process elements are merged into said generic process plan (pg. 5, par. 1, lines 7-11).

**Per Claim 25:**

The rejection of claim 1 is incorporated, and Schmidt further teaches wherein said instruction coded into each of said at least one non-generic process element introduces new process steps into said generic process plan (pg. 5, par. 1, lines 8-11).

**Per Claim 26:**

The rejection of claim 1 is incorporated, and Schmidt further teaches wherein said instruction coded into each of said at least one non-generic process element advises existing process steps in said generic process plan (pg. 5, par. 1, lines 8-11).

**Per Claims 27-29:**

These are apparatus versions of the claimed method discussed above (claims 24-26, respectively), wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also obvious.

*Response to Arguments*

8. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

*In the remarks, the applicant argues that:*

a) Jablonski merely disclose activities that are nested structures (i.e., activities are composed of sub-activities). For example, Fig. 4 of Jablonski merely discloses that "travel claim processing" is a composite activity composed of three sub-activities: "submit travel claim", "approve travel claim" and "reimburse client." These sub-activities are elementary, i.e., they are not refined further. Pages 36-37 of Jablonski therefore fail to teach or suggest storing a generic process plan and a non-generic process element containing a predetermined pattern as alleged by the Office Action. Rather, pages 36-37 merely disclose a type of activity having a nested structure, and thus being composed of sub-activities.

*Examiner's response:*

a) Examiner strongly disagrees with applicant's assertion that Jablonski fails to disclose the claimed limitations recited in claims 1 and 10. Jablonski clearly shows each and every limitation in claims 1 and 10.

Jablonski teaches storing at least one generic process plan ("The first step is mandatory ... obtain a valid **workflow specification**." on pg. 36, 2<sup>nd</sup> column, par. 6 to pg. 37, 1<sup>st</sup> column, par. 1; Workflow specification is interpreted as generic process plan.); storing at least one non-generic process element containing a predetermined pattern ("Functional Perspective ...

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*activities*” on pg. 37, 1<sup>st</sup> column, par. 4; Activities are interpreted as non-generic process element; they define the business process aspects of the generic process plan.).

In addition, see the rejection above in paragraph 7 for rejection to claims 1 and 10.

### ***Conclusion***

9. The Examiner suggests the applicant to amend claims 1 and 10 to include recitations such as “process aspects” and “generic process pattern” as described on pg. 7, par. 3 to pg. 8, par. 2 of the instant application.

10. Any inquiry concerning this communication from the examiner should be directed to Qamrun Nahar whose telephone number is (571) 272-3730. The examiner can normally be reached on Mondays through Fridays from 9:30 AM to 6:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Wei Y Zhen, can be reached on (571) 272-3708. The fax phone number for the organization where this application or processing is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QN  
June 22, 2007



MARY STEELMAN  
PRIMARY EXAMINER